

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A substrate with a transparent conductive oxide film, comprising a substrate and a transparent conductive oxide film provided on the substrate and constituted by a plurality of ridges and a plurality of flat portions,

wherein the surfaces of the ridges and the flat portions have ~~many~~ a plurality of continuous micron-size protrusions, and the plurality of ridges have a discontinuous portion and a continuous portion, the spacing between ridges being from 0 to 2.0  $\mu\text{m}$ .

Claim 2 (Original): The substrate with a transparent conductive oxide film according to Claim 1, wherein the protrusions have basal plane diameters of from 0.1 to 0.3  $\mu\text{m}$  and height/basal plane diameter ratios of from 0.7 to 1.2.

Claim 3 (Currently Amended): A substrate with a transparent conductive oxide film, comprising a substrate having a smooth surface and a transparent conductive oxide film provided on the substrate, wherein the substrate with the transparent conductive oxide film[[,]] has a haze of from 10 to 95% over a full wavelength region of from 400 to 800 nm, and the difference of ~~the absolute values between the maximum value and the minimum value of the haze (the maximum value – the minimum value[[ ]])~~ of the haze is not more than 50%.

Claim 4 (Currently Amended): The substrate with a transparent conductive oxide film according to Claim 3, wherein the substrate with the transparent conductive oxide film[[,]] has a haze of from 40 to 70% [[([)] an average of from 400 to 600 nm [( )]] in a

wavelength region of from 400 to 600 nm and a haze of from 20 to 40% ~~[[()]]~~ as an average of from 600 to 800 nm ~~[[()]]~~ in a wavelength region of from 600 to 800 nm.

Claim 5 (Currently Amended): A substrate with a transparent conductive oxide film, comprising a substrate having a smooth surface and a transparent conductive oxide film provided on the substrate, wherein the transparent conductive oxide film comprises discontinuous ~~small~~ ridges made of a second oxide, formed on the ~~small~~ ridges, wherein the surface of the continuous layer has ~~many~~ a plurality of continuous micron-size protrusions.

Claim 6 (Currently Amended): The substrate with a transparent conductive oxide film according to Claim 1, wherein the substrate with the transparent conductive oxide film~~[[,]]~~ has a sheet resistance of from 8 to 20  $\Omega/\square$  and a transmittance of from 80 to 90% at 550 nm measured by an immersed method.

Claim 7 (Currently Amended): The substrate with a transparent conductive oxide film according to Claim 5, wherein the ~~small~~ ridges have basal plane diameters of from 0.2 to 2.0  $\mu\text{m}$ .

Claim 8 (Original): The substrate with a transparent conductive oxide film according to Claim 5, wherein the first oxide is composed of  $\text{SnO}_2$  or  $\text{SnO}_2$  containing fluorine, the fluorine content being not more than 0.01 mol% based on  $\text{SnO}_2$ .

Claim 9 (Original): The substrate with a transparent conductive oxide film according to Claim 5, wherein the second oxide is a transparent conductive oxide containing at least one member selected from the group consisting of  $\text{SnO}_2$ ,  $\text{ZnO}$  and  $\text{In}_2\text{O}_3$ .

Claim 10 (Original): The substrate with a transparent conductive oxide film according to Claim 5, wherein the second oxide is  $\text{SnO}_2$  containing fluorine-doped tin as the main component, contains fluorine in an amount of from 0.01 to 4 mol% based on  $\text{SnO}_2$  and has a conductive electron density of from  $5 \times 10^{19}$  to  $4 \times 10^{20} \text{ cm}^{-3}$ .

Claim 11 (Currently Amended) The substrate with a transparent conductive oxide film according to Claim 5, wherein a film made of an oxide different in [[the]] composition from the first and second oxides, is formed between the discontinuous small ridges made of the first oxide and the continuous layer made of the second oxide.

Claim 12 (Original): The substrate with a transparent conductive oxide film according to Claim 11, wherein the first oxide is  $\text{SnO}_2$ , the different oxide is  $\text{SiO}_2$ , and the second oxide is fluorine-doped  $\text{SnO}_2$ .

Claim 13 (Original): The substrate with a transparent conductive oxide film according to Claim 1, wherein the substrate with the transparent conductive oxide film, has a haze of from 10 to 95% over a full wavelength region of from 400 to 800 nm.

Claim 14 (Withdrawn): A process for producing the substrate with the transparent conductive oxide film as defined in Claim 1, which comprises forming, on a transparent substrate, discontinuous small ridges made of a first oxide by an atmospheric pressure CVD method; and forming thereon a continuous layer made of a second oxide.

Claim 15 (Withdrawn): The process for producing the substrate with the transparent conductive oxide film according to Claim 14, wherein the small ridges are formed by an atmospheric pressure CVD method employing tin tetrachloride, water and hydrogen chloride.

Claim 16 (Withdrawn): The process for producing the substrate with the transparent conductive oxide film according to Claim 14, wherein the continuous layer made of the second oxide is formed on the discontinuous small ridges made of the first oxide, by an atmospheric pressure CVD method.

Claim 17 (Withdrawn): The process for producing the substrate with the transparent conductive oxide film according to Claim 16, wherein a film made of an oxide different in the composition from the first and second oxides, is formed between the discontinuous small ridges made of the first oxide and the continuous layer made of the second oxide, by an atmospheric pressure CVD method.

Claim 18 (Currently Amended): A photoelectric conversion element comprising the substrate with the transparent conductive oxide film as defined in any one of Claims 1 to 13, a photoelectric conversion layer on the transparent conductive oxide film, and having a rear face electrode on the ~~via a photoelectric conversion layer, on the substrate with the transparent conductive oxide film as defined in any one of Claims 1-13.~~

Claim 19 (Currently Amended): The photoelectric conversion element according to Claim 18, wherein the photoelectric conversion layer is a layer having p-, i- and ~~n-type layers~~ n-type layers formed in this order.

Claim 20 (Original): The photoelectric conversion element according to Claim 18, wherein the rear face electrode is a metal film containing Ag in an amount of at least 95 mol% in the film.

Claim 21 (Original): The photoelectric conversion element according to Claim 20, wherein the metal film contains Pd or Au in an amount of from 0.3 to 5 mol% in the film.

Claim 22 (Original): The photoelectric conversion element according to Claim 18, which has a contact-improving layer between the rear face electrode and the n-layer nearest to the rear face electrode, between the photoelectric conversion layer and the rear face electrode.

Claim 23 (Original): The photoelectric conversion element according to Claim 22, wherein the contact-improving layer has a resistivity of not more than  $1 \times 10^{-2} \Omega \cdot \text{cm}$ .

Claim 24 (Original): The photoelectric conversion element according to Claim 22, wherein the contact-improving layer has an absorption coefficient of not more than  $5 \times 10^3 \text{ cm}^{-1}$  in a wavelength region of from 500 to 800 nm.

Claim 25 (Original): The photoelectric conversion element according to Claim 22, wherein the contact-improving layer contains zinc oxide (ZnO) as the main component, and at least 90 atomic % of the total metal component in the layer is Zn.

Claim 26 (Currently Amended): The photoelectric conversion element according to Claim 25, wherein the layer containing ZnO as the main component[[,]] contains Ga or Al in an amount of from 0.3 to 10 mol% based on the summation with Zn.

Claim 27 (New): The substrate with a transparent conductive oxide film according to Claim 1, wherein each of the plurality of flat portions has a width of between approximately 0.1  $\mu\text{m}$  and approximately 2.0  $\mu\text{m}$ .